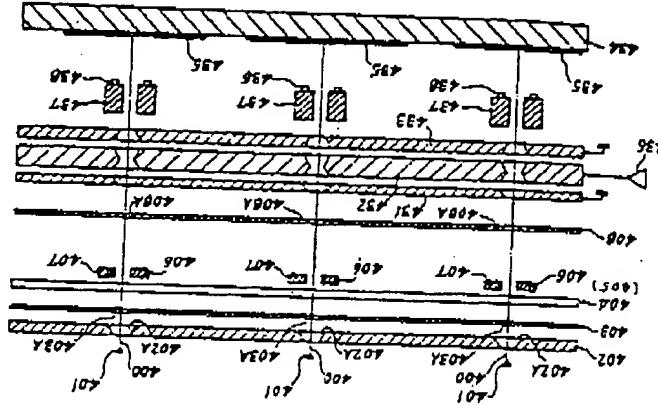


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1) CHARGED BEAM EXPOSING DEVICE
1) 61-69125 (A) (43) 9.4.1986 (19) JP
1) Appl. No. 59-163812 (22) 6.8.1984
1) NIPPON TELEGR & TELEPH CORP <NTT> (72) NOBUO SHIMAZU(3)
1) Int. Cl. H01L21/30, H01J37/305

PPOSE: To improve effective irradiation and image drawing speed of beams while increasing beam current value reaching the specimen's surface by a method wherein beams are formed so that they may almost correspond to the region wherein forming aperture groups are arranged to be irradiated with the beams.

INSTUTION: Electron beams are picked up from electron beam guns 401 arranged in matrix by an electrode sheet 402 to irradiate an aperture sheet 403 therewith. Square aperture image from apertures 403A are entered into a parallel static lens composed of electrode sheets 404, 405 and 406, 407 slenderly extending in X and Y directions. Next, a voltage impressed upon the electrode sheet 402 is set up at specified value while the focusing state of beams is controlled independently in X and Y directions and then rectangular aperture images are projected on a rectangular forming aperture group setting up part 408. The rectangular forming apertures 408A are irradiated with most of beams making electron beam utilization effective. Finally the images of aperture 408A groups may be contracted through the intermediary of contractible projecting system comprising static lenses 431 ~ 433 to be projected on specimens 435.

SHEET BODY PROCESSING
61-69126 (A) (43) 9.4.1986 (19) JP
Appl. No. 59-134911 (22) 28.6.1984
FUJITSU LTD (72) TAKAYOSHI MATSUYAMA
Int. Cl. H01L23/48, H01R13/16, H05K1/18